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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/740,615	12/18/2000	Sheldon Schultz	2003-0001.20	1773

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EXAMINER
LAM, ANN Y

ART UNIT	PAPER NUMBER
1641	

DATE MAILED: 09/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.	SCHULTZ ET AL.
Examiner	Art Unit
Ann Y. Lam	1641

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 16 June 2004.
2a) This action is **FINAL**. 2b) This action is non-final.
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 19-29 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) Claim(s) _____ is/are allowed.
6) Claim(s) 19-29 is/are rejected.
7) Claim(s) _____ is/are objected to.
8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
5) Notice of Informal Patent Application (PTO-152)
6) Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 19-29 are rejected under 35 U.S.C. 102(e) as being anticipated by King et al., 5,633,724.

The King et al. reference discloses an apparatus comprising an optical light source (see column 14, line 20), an optical detector (208a, see column 6, lines 13-20) for detecting a spectral emission characteristics of individual PREs and other light scattering entities, an image processor (122, see column 5, lines 58-59) operatively connected to the detector for constructing a computer image of the positions (see column 4, lines 52-55 and column 5, lines 53-60, and column 6, lines 13-15) and values (see column 6, line 60 – column 7, lines 22) of the spectral emission characteristic of individual PREs and, discriminator means (122, see column 5, line 58, and column 7, line 7) for discriminating PRE's with a selected spectral signature from other light-scattering entities in the computer image, and output means (122, see column 5, line 58, and column 6, lines 13-15) for displaying information about the field based on the information about the selected PREs.

As to claim 20, the light source includes a bright field/dark field lens (see column 9, line 31, and column 15, line 5.)

As to claim 21, the light source includes means for illuminating at a plurality of different wavelengths (see column 12, line 2.)

As to claim 22, the detector is a two-dimensional photodetector array (208a, see column 6, line 8-9) capable of detecting a spectral emission characteristic simultaneously from a plurality of illuminated PREs.

As to claim 23, the detector includes means (see column 12, line 2) for spectrally separating light emitted from the PREs, and said image processor operates to form a computer image of the positions (see column 4, lines 52-55 and column 5, lines 53-60, and column 6, lines 13-15) and values (see column 6, line 60 – column 7, lines 22) of the emission spectral characteristic of individual PREs and other light-scattering entities.

As to claim 24, the optical detector includes a two-dimensional array of optical fibers (450, see column 14, line 20) whose output is aligned so as to constitute a line source that is sent into a grating or prism (104 see column 5, line 6), and a two-dimensional detector array (208a, see column 6, line 8-9).

As to claim 25, there is a means for moving the target in an x-y plane (see column 10, line 6-7.)

As to claim 26, the image processor operates to construct an image of PRE positions (see column 4, lines 52-55 and column 5, lines 53-60, and column 6, lines 13-15) and peak intensity (see column 4, lines 52-55 and column 5, lines 53-60, and column 6, lines 13-15)

As to claim 27, the image processor operates to construct an image of PRE positions (see column 4, lines 52-55 and column 5, lines 53-60, and column 6, lines 13-15) and fluorescence emission spectrum or Raman spectrum (see column 6, lines 42-50.)

As to claim 28, the discriminator means includes means for discriminating PREs based on detected values of peak intensity (see column 4, lines 40-42, column 4, line 66 – column 5, line 4, and column 6, line 62 – column 7, line 8.)

As to claim 29, the discriminating means discriminates for a selected type of PRE, or those PREs which are interacting with one another and those which are not (see column 4, lines 40-42, column 4, line 66 – column 5, line 4, and column 6, line 62 – column 7, line 8.)

Response to Arguments

Applicant's arguments filed June 16, 2004 have been fully considered but they are not persuasive.

Applicant argues on page 11 that the King et al. reference does not show or suggest claim element (iv): discriminating means for discriminating PRE's with a selected spectral signature from other light-scattering entities in the field, but rather King et al. discloses that the total intensity of all light from the pixel array reaching the detector is detected.

In response, Examiner asserts that a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

In this case, King discloses all of the elements claimed by Applicant, including a discriminating means since the component (122) in King is a computer that is connected to the detection system that detects the light-scattering entities in the field and the computer is capable of discriminating PRE's with a selected spectral signature from other light-scattering entities in the field. In Applicant's specification, the discriminator means is also a computer (see page 19, line 6.) The computer (122) in King is capable of performing the same function as the claimed discriminator means (col. 5, lines 53-60.)

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ann Y. Lam whose telephone number is 571-272-0822. The examiner can normally be reached on M-Sat 11-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Long Le can be reached on 571-272-0823. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A.L.



Christopher L. Chin

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9/14/04